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(54) A universal bottle closure for enteral transfer devices

- (57) The universal bottle closure of thermoplastic plastic serves for the optional connecting of enteral transfer devices to one [or another] of different bottles, the necks of which have a smaller or a larger diameter, as the case may be. The universal bottle closure has two caps (1, 2) which are positioned coaxially with their openings in the same direction, and also have different opening diameters for the formation of an annular space (3). The inner cap (2) is produced from a softer thermoplastic plastic than that of the outer cap (1). Both of the caps are permanently connected with one another. The inner cap (2) has a sealing flange (7) projecting to the inside, which [flange] is, for the purpose of bearing placement on the sealing surface of the bottle, configured in a smaller diameter and has a sealing flange (8) projecting outwardly, which [flange] is configured for bearing placement on the sealing surface of the bottle of larger diameter. The "softness" of the inner cap is selected in such a manner that, on the one hand, the closure effect is guaranteed, such as by means of a snap-on closure, for example, and, on the other hand, a good sealing is ensured through the bearing placement of the inner flange. The outer cap, which is preferably configured as a clamping nut, presses the likewise correspondingly soft outer flange onto the assigned bottle of larger diameter if the closure is used for such a bottle.

Patent claims:

1. A universal bottle closure of thermoplastic plastic for the optional connecting of enteral transfer devices to one [or another] of different bottles, the necks of each of which have a smaller or a larger diameter, with two caps (1, 2) which are positioned coaxially with their openings pointing in the same direction and also have different opening diameters for the formation of an annular space (3), **characterized in that**, the inner cap (2) is produced from softer thermoplastic plastic than the outer cap; that, both of the caps are permanently connected with one another, however; and that, the inner cap (2) has a sealing flange (7) projecting to the inside, which [flange] is, for the bearing placement on the sealing surface of the bottle, configured in a smaller diameter and has a sealing flange (8) projecting outwardly, which [flange] is configured for the bearing placement on the sealing surface of the bottle of larger diameter.
2. A universal bottle closure in accordance with claim 1, characterized in that, for the bonding of both of the caps (1, 2), a connecting ring (9) is provided between the two caps, which [ring] has essentially the materials characteristics (hardness) of the outer cap (1).

3. A universal bottle closure in accordance with claim 1 or 2, characterized in that, the inner cap (2) is configured as a snap-on cap.
4. A universal bottle closure in accordance with one or more of the preceding claims, characterized in that, the outer cap (1) is configured as a clamping nut with an internal threading (4).